

## Beyond Globalization Monetary tools towards a sustainable regional development

Brunnbuber, Stefan\*

Six global megatrends are considered which are likely to impact any region in the world at any time. Regional solutions to such challenges will require to revisit the currently prevailing assumptions concerning our industrial age money-system. It reveals itself not a neutral component at the service of the system, but instead significantly affects the options available in the real economic sector. Apart from the conventional solutions (neo-liberal and neo-keynesian approach), complementary monetary solutions arise, which can balance out the whole financial system on a regional level and can lead to a more sustainable and just future.

Keywords: global trends, monetary-system, complementary solutions

### 1. Introduction: Six global megatrends

The UN office detected in the 90<sup>th</sup> of the last century over 15.000 different problems in the ecological, social and economic field throughout the world. The question is still: Are they isolated problems or do they have a common attractor? The following graph illustrates this:

#### A common attractor?

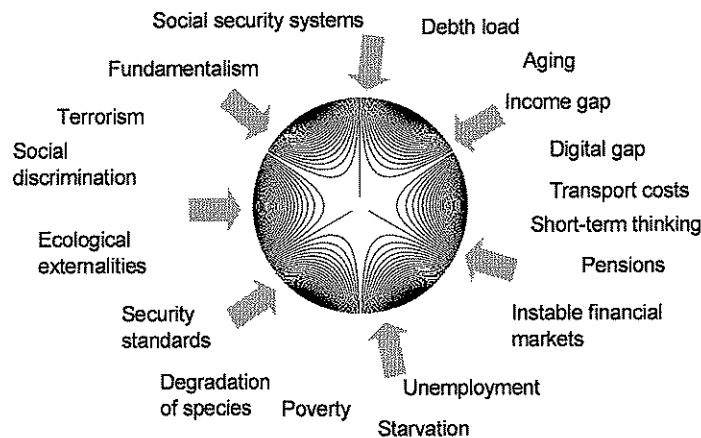


Fig. 1: Are ecological, social and economic problems isolated issues or do they have a common attractor?

If we start deducing this overall perspective, we can indeed detect some major trends (Lietaer 2000, Meadows 1972, Meadows 1993).

- *Unemployment/poverty*: Massive job losses have not slowed, and there are now more than 1 billion people world wide without adequate labour contracts. Outsourcing, deregulation and globalization favour these developments. The opening of China as a cheap source of labor has been a lure for corporations worldwide.
- *Aging*: In the northern hemisphere societies are aging rapidly, effectively diminishing the work force by up to 25% and more, and further burdening our social security systems for decades to come. Japan and Italy are the first ones in this process, but here again the same trend can be observed elsewhere.
- *Ecological damage* is happening throughout the world and the impact is not regionally limited, (ozone depletion, climate changes, desertification, the extinction rate of species, and the loss of biodiversity) and is assuring increasing insurance costs and steady declines in the quality of living.
- *Instability of the financial system*: A significant increase in the frequency of banking and currency crises throughout the last 30 years has had a negative wealth effect on the global middle class. According to the World Bank, no less than 87 countries have undergone a monetary crash over the past two decades.
- *Discrepancy of wealth and information*: An increase of wealth concentration within nations and between them has effectively been accelerating for decades. Now over 1 billion people have less then 1 dollar, and simultaneously the 200 richest people earn half of the world's income. At the same time the so called „digital gap” is widening, further separating those who have access to information from those who don't.
- *Military conflicts*: An increase in the frequency of geopolitical conflicts and terrorism can be detected throughout the world, and it is very likely that this development will not end by itself. The following graph gives us a first overlook:

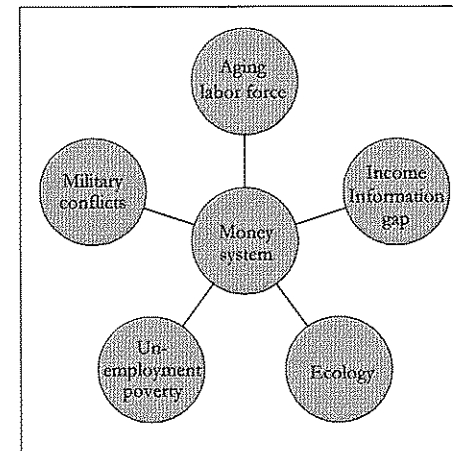


Fig. 2: Six major global trends, where the financial system plays a key role.

\* Brunnbuber, Stefan, egyetemi tanár, University Wuerzburg/ PPKE University (Budapest)

We perceive ecological degradation, income disparity, poverty, concentration of wealth, increasing crime rates, problems associated with aging, military conflicts, the digital gap, etc., as isolated problems and search for regionally specialized solutions. But these are not isolated problems; they are all linked to each other. One way to detect missing and/or overlooked links is to focus more closely on the underpinnings of the monetary-system, which is probably the most neglected aspect within the sustainability debate. Nevertheless, it may also be the most powerful leverage point available to us in working towards a „common, sustainable and more fair future”. And more over: All these megatrends can hit each region at any time in the world. It just depends on the circumstances. In the worst case the affected region is hit by a vicious circle: Economic depression leads to less investments and less taxation, leading to bad infrastructure and bad image, to reduced financial power, less demand less qualified labor and a consecutive exodus ect. Before we start looking at possible problem solvings, we should look closer to the common attractor: the money system. This is true, as there is no single megatrend which is not affected by the given monetary system.

## 2. The overlooked connection: – the money-system

Looking more closely at the structure of the money system itself we can see that it is not a neutral instrument of exchange it is often assumed to be, but that it's characteristics create at least six negative side-effects from a sustainability perspective. These side-effects systematically distort our future options, human behaviours and economic decisions. We consider the money-system as somewhat in the centre of these six mega-trends as it affects all of them. The characteristics of today's financial system that are at the source of these side effects are: all our national currencies are fiat currencies, driven by an interest rate, have a scarcity criterion and are all orchestrated through a hierarchical monopoly of the central banks. These characteristics have at least six consequences as follows (Lietaer – Brunnhuber 2004):

### 2.1. Six side effects:

Contrary to the hypothesis of neo-classical economics, money is not a neutral medium of exchange that doesn't affect the kind of transactions performed or the relationships among its users. There are indeed three forms of neutrality that have to be taken into account.

First, it is often assumed that money-systems have no effect on the nature of economic interactions that occur in a society. Second, it is assumed that money systems have no affect on the relationships that exist between the actors using them. And finally, it is assumed to be neutral in its role of amplifying the business cycle. None of these three forms of neutrality exist in the modern money economy. Instead, it can more likely be assumed that through the „agreements” reached regarding money as a medium of exchange, a number of important system-inherent developments are triggered that must be taken into consideration. As a metaphor: water is not neutral for the fish that live in it, even if it remains completely transparent and invisible to them. There are indeed six system-inherent side effects of our conventional money system:

2. *Compulsory growth pressure* (Einhorn et al. 2001): Typically, economists attribute growth to increases in labour productivity, changes within the population or improved technologies. These are indeed valid factors influencing growth. But in addition, the monetary system itself has a built-in systematic mechanism that necessitate growth. Since there is interest payments built in at the origin of every monetary expansion, there is an *inherent obligation* for all actors within the system to grow. In order to pay back our debt we have always to produce an increased cash flow; the higher the interest-rate the faster we have to grow. Zero growth is therefore inherently impossible; the absence of growth would sooner or later lead to the failure of the indebted market participants. The higher the debt, the more limited the options are to achieve sustainability. Particularly in the case of debt-laden individuals and companies, the present monetary and financial system exerts systematic pressure to achieve growth at any costs – regardless of whether it makes sense for the entities involved or enhances the quality of life in a society.

3. *Short-termism*: Further we must take into account the fact that the modern money economy significantly affects our time priorities. As a rule, we perceive time as a linear, irreversible vector within which short-term situations are evaluated as more important than future ones. Such preference for the short-term future is accentuated by the fact that any future costs or income are eventually discounted with, among other factors, the interest rate of the currency involved. If for example the sum of 91 euro has a risk-free interest rate of 10 %, this corresponds to 100 euro in one year. If we look at this equation from a different perspective, it shows that 100 euro in one year is the same as 91 euro today, even if there is no inflation. In the same way, the technique of „discounted cash flow” reduces 100 euro in 10 years to approx. 30 euro today. After 200 years the 100 euro would correspond to the insignificant amount of 0.0003 euro. Since practically all our money is created by bank loans, interest is automatically incorporated in it. Thus, it is not surprising that from a financial view point, it rarely occurs to anyone in our civilisation to be concerned about the proverbial „seventh generation”. Therefore, our money system is the hidden persuader of the short-termism characteristic of our society.

4. *Concentration of wealth*: The gap between the rich and the poor has significantly increased within the last 30 years. Here too, the interest rate mechanism accentuates the process. Those who already have money automatically receive more money; while those who don't, and have to borrow as a consequence, end up with even less. This inequality of *income distribution* is besides other factors (globalization, technology etc.) also accentuated by our monetary system, and its effect does not reflect differences in ingenuity or industriousness.

5. *Erosion of social capital*: The cohesion of a society is not due to geographical closeness, a common religion or the common nationality; but to the capacity of a society to generate trust, solidarity and responsibility. R. Putnam (Putnam 1993) shows that democracies work best, when the social capital is high; and F. Fukuyama (Fukuyama 1995) came to the same conclusion for the good functioning of a market system. Our money-system however is not promoting social capital. Instead it has been shown to encourage such collective emotions as greed, anxiety, herd behaviour, individualism and competitive behaviour (Lietaer 2001). Consequently, money is nowhere value neutral, as is implicitly assumed in economic theory. Instead, it has significant effects on our social lives. To a certain extent, our money-system plays the role of a filter through which we perceive our social and ecological reality.

6. *Towards capital concentration*: 51 of the world's 100 largest economies are no longer countries at all, but multinational corporations. This development is also accentuated by the given monetary-system as it is more profitable for the financial system to provide financing to one huge corporation, rather than dealing with hundreds of smaller entities that would add up to the equivalent amount of funding. It's therefore not surprising that there is a systematic financial incentive towards building huge corporations which encourages industry concentration in many sectors such as energy, car manufacturing, military equipment, pharmaceuticals, etc. As opposed to small or regional businesses that create more employment, our monetary-system favours mergers and acquisitions that create global corporate giants, even if they tend to stifle innovation and diversification. There is a therefore positive feedback loop between the incentives of the financial sector and business concentration.

7. *Immanent instability* (Soros 2001): A global casino of unprecedented proportions determines our money's value. Over \$1.3 trillion are traded per day in foreign exchange markets, a figure that is almost 100 times greater than the trading volume of all of the world's stock exchanges combined. Nearly 96% of these transactions are purely speculative; they do not relate to the „real” economy, nor do they reflect global movements or exchanges of actual goods and services. Functioning as a speculative market, current economic systems can be undermined not only by real economic news, but by mere rumour or perception as well. This unstable monetary situation has resulted in the many foreign exchange crises that have affected no less than 87 different countries over the past 25 years, of which Argentina early in 2002 was but its latest victim.

Moreover the banking system's money-creation process tends to amplify the boom and bust fluctuations of the business cycle. The banking system is indeed susceptible to the herd mentality when credit policies towards specific economic sectors or countries are either relaxed or restricted. Specifically, when business is good, banks tend to be more generous with credit, thereby pushing the „good times” towards potentially inflationary boom periods. Conversely, as soon as the business horizon seems bleaker, banks tend to reduce credit availability, and in the process contribute to the deterioration of small businesses, and eventual dips into full-blown recessions. Notwithstanding the attempts by Central Banks to reduce such fluctuations by providing interest rate signals, the current process of creating money through bank-debt remains, in practice, a strong boom/bust-amplification mechanism. In short, the collective actions of the banking system tend to exacerbate the business cycle in both boom and bust directions.

### 3. A systemic-integrative approach (Kennedy – Lietaer 2004):

As the chapter above tries to answer the question: „What does the money-system with us?”. The conventional way of coping with these problems is the other way around, by asking: What can we do with the money?

The majority of contemporary economic thinking tends to fall into one of the two dominant schools: either the Neo-liberal or the Keynesian. The (neo-) liberal perspective tends to favour increased deregulation, privatization and a revival of personal freedom and responsibility. The policies of the WTO or IMF adjustment programs are examples inspired school. They emphasize the importance of free markets, and claim that markets will automatically lead to an optimal allocation of resources. The price signal is assumed to offers sufficient information on the relative scarcity of various goods and services. But the distri-

bution within a deregulated market is prototypically just a „maximizing principle”, which depends on the existing institutional framework, and therefore can not itself tackle the question of what to maximize and how to achieve a fair distribution.

In contrast, the (neo-) Keynesian approach favours increased regulation, and deficit spending on public goods. Taxation and subsidies are considered necessary tools to correct market imperfections, as markets are considered inherently unstable. F. D. Roosevelt's „New deal” and the Marshall-plan for Germany after the Second World War are historical examples of this approach. This methodology takes into account markets' instabilities and imperfections; however, it regrettably leads to increasing debt burdens and can result in mis-allocation of resources directly induced by policy errors.

Neither approaches are wrong, but both are partially incomplete if the objective is to attain a truly balanced financial system. First, both are operating within the model of the utility maximizing „homo economicus”, which is just one simplistic pattern of human behaviour among many (Shiller 2003). Second, they both depend on the unchallenged and given monetary-system (fiat-currency, scarcity criterion, interest rate driven, hierarchical monopoly) and are therefore predictably married to the idea that only additional growth within the given economic framework can lead to further flexibility in dealing with social, economic and ecological issues.

If we stop looking at the economic system from a liberal or keynesian perspective, and start instead looking at it from a system's view, the considerations and conclusions are much different. But what exactly do we mean by a „system's perspective”? (Lietaer 2001).

1. An integrative or systemic perspective is equivalent to a helicopter view. We are no longer actors, but observers, and look at the monetary system not from the ground level, but from 10,000 feet above.

2. The systemic perspective makes it possible to question the two unquestioned and overlooked premises that conventional views offer: Firstly that all exchanges necessarily occur through the conventional money-system (Fiat currencies with an interest-rate and a scarcity criterion that are organized by a hierarchical monopoly). And second, that we can rely on a trickle down effect within the growth paradigm, so that additional growth is the only way to tackle social or ecological problems. Indeed there is no doubt that we must grow to accommodate increasing populations, but should we not question what kind of growth is relevant? The steel or car industry, oil extraction or the health and education sector, clean air or the access to information? From a conventional viewpoint, the GNP statistic will simply add up all the numbers, irrespective of the desirability or problems that they may represent.

3. The systemic approach attempts to combine the advantages of the neo-liberal and neo-keynesian strategies: individual responsibility combined with development of social goods. As we will see in the next chapter, complementary solutions arise as an extension of the conventional monetary system. These solutions not only meet the aforementioned criterion, they simultaneously have the potential to balance out the entire system. We can call them „built-in purpose” (BIP)-currencies.

4. And finally, a systemic approach can more clearly distinguish between the effects of the real economic sector of goods and services and those of the monetary and financial sector. Finally, from a systemic point of view, in addition to conventional solutions, a new set of solutions – complementary currencies – arise (Lietaer – Nerb 2000).

But what does complementary mean? Two entities are said to be complementary to each other when they have no causal link, but are nevertheless both necessary to understand or describe an empirical process, event, or behavior. For instance, for a given text „form” and „content” are complementary to each other: neither is causally related to the other; yet neither can exist without the other. One can truly evaluate a text only by observing both form and content together. Similarly, the concepts of „continuity” and „change” are complementary to each other. If something has no continuity whatsoever, it can't exist as an entity. Yet, as Heraclites had already observed in the 7<sup>th</sup> century BC: everything always changes. Some other examples: wave and particle theories in physics; the interactions between two colors in optics; explanation and understanding in philosophy; semantics and syntax in linguistics; or the relations between two archetypes in psychology; etc. As we can see, each of these binary concepts has no causal link to the other – instead they operate in parallel to each other – but in order to understand the physical world or human behavior, both need to be taken into account.

How does the complementary principle apply to economics, and particularly to monetary systems? Complementary currencies, as described here, are not causally linked to conventional currencies, but rather they operate in parallel with them. Both the conventional and complementary currencies are based on different principles; but they nevertheless need each other in a reciprocal way. That means that complementary currencies (Kennedy – Lietaer 2004) play a role that the conventional monetary system does not cover at all, or not as well. For example: The conventional money system propelled us through the industrial age, it has been successful at creating global markets, and stimulates competition which has created unprecedented wealth. However, it is an interest-rate driven fiat-currency, created through a hierarchical and monopolized organization structure that exacerbates income disparity, erodes social capital, and promotes short term thinking. These negative aspects cannot all be corrected within the context of the conventional system itself. However, they can be addressed by a complementary currency system, run on totally different principles (no interest-rates, not necessarily attached to a nation state, promoting social capital, and bottom up organization). And again both – complementary and conventional – depend on each other to stabilize the overall system.

The complementary approach itself also creates an important feed-back loop within the economic systems as it stabilizes the conventional economic dynamics: it operates as an anti-deflationary during the downturns and as an anti-inflationary whenever the economy booms. It has actually been quantitatively proven that complementary currencies help central banks in their economic stabilization efforts (Stodder 2000). Furthermore it holds the promise of reducing social costs and can play an important counterbalance to the process of globalization as it empowers regionalization. From a systemic point of view, both strategies have a direct and indirect impact on the given economic system and both are equally necessary. The following graph illustrates this argument:

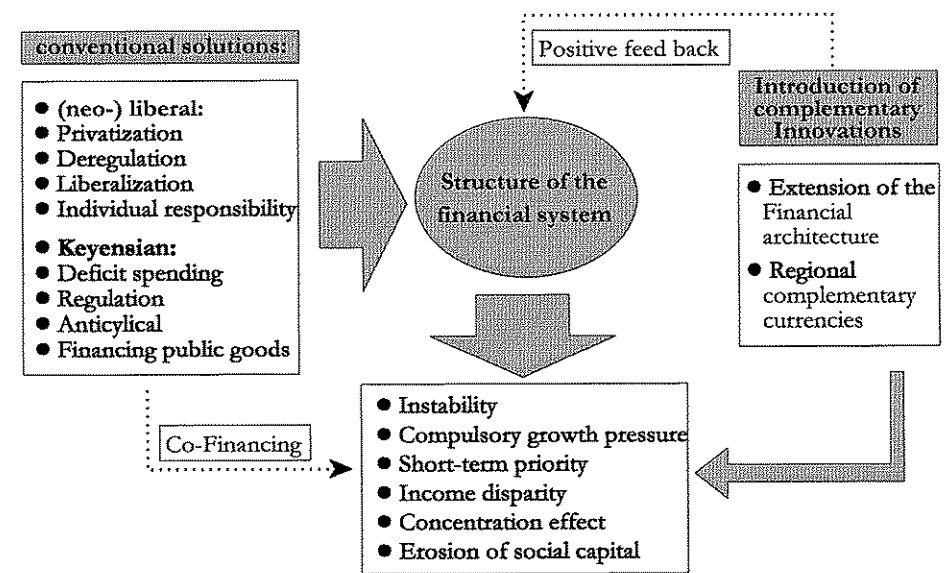


Fig. 3: The monetary system from a systemic view

From a systemic point of view both strategies are necessary to balance the economic system, as both strategies produce desirable feed-back loops from the sustainability perspective. For example; the reforms of the conventional system could encourage more transparency and control, (anticorruption- laws) thus improving confidence in the financial system, and freeing otherwise inefficient resources to address ecological or social problems. By implementing corporate governance standards, and social and ecological standards one can also directly impact the economic system itself. The main co-financing instruments (Rademacher 2002) on a global level are trading with Co-2 emission rights, an international transactions-tax (as proposed by J. Tobin (Tobin 1978)), taxation of petrol for planes and international shipping, anticorruption-laws, debt relief and the regulation of off-shore locations. The financial volume rises up to over 100 Bill USD/year over at least 15 years (see [www.marshallplan.org](http://www.marshallplan.org)). However, as pointed out above, all such conventional solutions run through the existing monetary system and will therefore continue more or less producing all six of the negative side effects identified earlier. To consider using only conventional reform solutions is like trying to fill barrel with a leak in its bottom without ever taking into account the leak itself.

#### 4. Discussion: The Rawls experiment

If we consider the concept of sustainability „...as a development, which fulfils the present needs without risking that future generations cannot fulfil their own needs...” (Brundlandt 1986), we can be more precise. What does sustainability mean from a monetary perspective? It includes at least five further characteristics:

1. Achieving a long term-perspective in contrast to the shareholder-value, which focuses mainly on the short-term only.
2. Reducing the income gap which otherwise favours violence and further military conflicts, as well as a reduction of life expectancies.
3. Ensuring that the debt load is not simply shifted to burden further generations.
4. Tackling social issues, especially social care and unemployment.
5. Coping with the energy issue in order to offer a long lasting independent resource.

Within today's conventional monetary framework the five aspects of the sustainability perspective are not achievable. But if we start considering a systemic view and complementary approach within it, we can distinguish the balancing impact of the monetary system as a whole.

The common answers to reach these goals so far are technological changes and more information for the actors. People will change their life style if they are aware of the expected consequences. In order to achieve these goals we have to change the given financial incentive structures and here again the money system will play a key role as it psychologically dictates many of the decisions we make.

G. Soros quotes: „International trade and global financial markets are very good at generating wealth, but they cannot take care of other social needs, such as the preservation of peace, alleviation of poverty, protection of the environment, labor conditions, or human rights – what are generally called 'public goods'.” (Soros 2002)

If this is true we can put the arguments above in a more broadened context, using the so called J. Rawls experiment (Rawls 1971). His question is: What makes a society a just or fair society? What are the „basic structures” of a society and when can we consider them as fair? In order to answer this question, J. Rawls is using the following mental experiment: What are the claims of members of a society, where the social status and the economic success remains anonymous? Let's consider the following: What are the social and economic standards people would decide for, if their own future is not predictable? If we all don't know what will happen to us? J. Rawls asked all actors to put themselves behind a „veil of uncertainty” and ask the question again: What is going to be the consensus, if we don't know what's happening with us in the future? That means, we don't know, whether we are going to be rich or poor, healthy or sick, unemployed or on a tenier track. We don't know whether we are going to be born in the Sahel Zone or the desert of Gobi, where we have to walk 20 miles for 3 liter of drinking water, or whether we are sitting in a full climatized office in Manhattan trading with billions of dollars. Behind this „veil of uncertainty” we even don't know whether we are going to have a rich heritage or we are going to be brought up in the streets La Paz, whether we can not write or read or having a PHD from Berkeley. Again: What are the economic standards and norms we would choose, if we all didn't know all that?

We can not develop the whole of Rawls argument here. But with regard to social and economic standards, people are acting rational in this so called „fictious, ideal-typical and

contra factic situation”, if they agree with the so called „differential principle”: „Social and economical inequality are acceptable, if they are in favour of the least advantaged people within a society of cooperating actors” (Rawls 1971). That means: People who don't know their future economic perspective in society (poor or rich, Berkeley or La Paz ect.) will accept inequality as long as the most disadvantaged people are benefiting from the asymmetric distribution of created wealth. If we start taking such a strong argument for sure, we can concretize it in more details:

First, the neo-liberal model would not be the only model people would agree with behind the „veil of uncertainty”, as they might come up with an underprivileged position in a lower developed country. It would be just not rational to follow this economic model exclusively, where the individual maximizing principle supposed to guarantee a better life for all.

Second, people would lay stress on different forms of co-financing principles as they could be the least off. That's means, behind the veil of uncertainty the actors would find a consensus on any kind of taxation which considers the less privileged (unemployment, working poor, etc.), as this can happen to each actor, when the „veil” is lifted.

Third, People are not forced to accept the given money-system as the *only* single option available. With regard to create and stabilize the regional wealth in a globalized world, it would be more than rational to accept complementary monetary solutions as mentioned above. That means, as we don't know in which region in the world we are going to life, it make sense to favorize a monetary system stabilizing the wealth, income and distribution in each region, regardless to the benefits or distress of the global financial markets: Complementary currencies on a regional or sectoral level can face this.

If we want to live in a more just and a more sustainable society facing global megatrends and impacts, complementary monetary tools can play an important role towards these goals. As we are not only talking about our own but also about the future of the next generations, its worthed to consider.

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